REMARKS

Claims 1-11 are pending. Claims 6 and 7 have been allowed. In this response claims 1, 6-7 have been amended. Reconsideration and allowance based on the above amendments and following remarks are respectfully requested.

Interview

Applicants appreciate the courtesies extended to Applicants representative during the interview conducted on May 1, 2009. During the interview the rejection to claim 1 under 35 U.S.C. § 101 was discussed. It was determined that amending independent claim 1 to include one or more processors would address this rejection. Applicants note that claim 1 has been amended in this manner.

Also, during the interview Applicants claimed features recited in claim 1 were discussed in view of the teaching of McCorkle. Applicants noted that independent clam 1 recites two distinct signals one derived as a relationship between the amplitude of samples and the other based on the phases of samples in which these two signals are combined and then a synchronization pulse is generated from the combined signal. It was discussed that McCorkle teaches parallel synchronization process in which independent signals relating to specific correlators are independently processed and used in adjustment of the phase. The Examiner stated that he would review these remarks and arguments in view of this discussion.

Allowed Claims

Claims 6 and 7 which contained allowable subject matter have been amended into independent form. Accordingly, claims 6 and 7 are now in condition for allowance.

§ 101 Rejection

Claim 1 stands rejected under 35 U.S.C. § 101 as not being related to a statutory class. In response, as discussed in the interview claim 1 has been amended to recite one or more processors to address the 101 issue. Thus, Applicants respectfully submit that claim 1 is now

directed to a statutory class. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Prior Art Rejections

Claims 1-5 and 8-11 stand rejected under 35 U.S.C. § 103(a) in view of Peyla et al. (U.S. 6,539,063), Huang et al. (EP 0896457) and McCorkle et al. (U.S. 6,505,032). This rejection is respectfully traversed.

As discussed during the above noted interview, neither Peyla, Huang nor McCorkle teach or suggest "driving a first signal dependent upon the relationship between the amplitudes of the samples of each pair, a second signal dependent upon the relationship between the phases of the samples of each pair, combining the first and second signals and generating the synchronization pulse in response to the resultant signal changing in a predetermined manner" as recited in independent claim 1. Specifically, there is no teaching or suggestion of generating two distinct signals one related to amplitude samples and the second related to phase samples, where these two signals are combined and a single synchronization pulse is generated from the combined signal phase.

McCorkle has been relied upon to provide the above teachings. However, McCorkle teaches a parallel processing system. As discussed at columns 9 and 10, N different signals are provided to N different correlators 31_1-31_N. Each one of these are processed independently and sent to the timing generator, where each signal is processed in a parallel to aid in phase adjustment. See column 10, lines 7-24.

During the interview the Examiner expressed concerns that the disclosure of "through coherent addition, the UWB Casing system uses the energy from the different multi-path signal components to reinforce the received signal, thereby improving the signal to noise ratio," as disclosed at column 10, lines 32-35 read on Applicants claimed signal combining. Applicants respectfully submit that this section of McCorkle and the "coherent addition" relates to the addition of different multi-path components. Each of these will require independent synchronization, which is possible due to the plurality of parallel tracking correlators. There is no teaching or suggestion of addition of first and second signals as claimed by Applicants prior

to generating a synchronization pulse. Also, further evidence of parallel synchronization is provided in columns 9 and 10 in which it discusses multiple signals $31_{1\text{-}N}$ being processed independently in parallel and also processed in parallel and independently in the timing generator $7_{1\text{-}N}$ which correspond to the tracking correlators. Thus, there is no teaching or suggestion other than parallel processing.

Thus, McCorkle fails to provide the necessary teachings to read on Applicants claims.

Further, Peyla and Huang fail to remedy any of the deficiencies of McCorkle. Thus, combination of Peyla, Huang and McCorkle fail to teach the feature of independent claims 1, 10 and 11 as required. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

CONCLUSION

For at least the reasons above, Applicants respectfully submit that claims 1-11 are distinguished from the cited art. Favorable consideration and prompt allowance are earnestly solicited.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Chad J. Billings, Reg. No. 48,917, at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies

to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: May 20, 2009

Respectfully submitted,

By _____

Chad J. Billings
Registration No.: 48,917
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant